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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,809	10/24/2000	Barry L. Spletzer	SD6337/S92307	4279

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Sandia National Laboratories  
Patent & Licensing Center  
P O Box 5800-MS-0161  
Albuquerque, NM 87185-0161

EXAMINER
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NGUYEN, CHANH DUY

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 12/16/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/695,809

**Applicant(s)**

SPLETZER ET AL.

**Examiner**

Chanh Nguyen

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 10 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Remarks***

1. The response filed on August 21, 2003 has been entered and considered by examiner.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1, 7-9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jouppi (U.S. Patent No. 56,549,215) in view of Kreitman et al (U.S. Patent No. 5,956,00).

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As to claim 1, Jouppi discloses a video display system as recited in claim 1 with exception of describing the use of an image transformer. For example, Jouppi teaches the image including a first portion to be displayed at a first resolution (e.g., color) and a second portion to be displayed with a second resolution (see column 1, lines 46-52 and column 7, lines 7-60). Jouppi teaches a first video source (e.g., camera 104 or projector 540) mounted relative to the display medium (84 or 522), a second video source (e.g., camera 106 or projector 542) mounted relative to the first video source (104 or 540) and the display medium (84 or 522). Kreitman teaches transformation unit (26) transforming the data to compensate for the misalignment of the basic projector units (24). This reads on the claimed limitation "image transformer" as recited in the claim. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the image transformer as taught by Krietman to the projector of Jouppi so as to avoid misalign between to image projected by projectors; see column 1, lines 33-45 and column 2, lines 3-30 of Kreitman.

As to claims 8-9 and 11, these claims differ from claim 1 only in that claim 1 is apparatus whereas claims 8-9 and 11 are method. Thus, method claims 8-9 and 11 are analyzed as previously discussed with respect to apparatus claim 1 above.

As to claim 7, Kreitman clearly teaches a homogeneous transform; see column 7; lines 1-6.

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4. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jouppi in view of Greitman as applied to claim 1 above, and further in view of Washino et al (U.S. Patent 5,625,410).

As to claims 2-6, note the discussion of Jouppi and Greitman above, Jouppi and Greitman do not mention a video steerer as recited in claims 2-3 including pan and tilt motion as recited in claims 5-6. In the same field of endeavor (i.e. projectors), Washino teaches cameras having functions of pan, tilt ; see column 5, lines 8-11 and column 7, line 50 through column 8, line 47. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the video steerer as taught by Washino to the cameras video projecting image as taught by Jouppi as modified by Kreitman so that the image projected the display screen can be adjusted by the operator via the projectors.

***Allowable Subject Matter***

5. Claims 10 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments filed August 21, 2003 have been fully considered but they are not persuasive.

On page 3, first paragraph, applicant argues that Jouppi does not disclose a "...video display system for displaying on a display medium an image, wherein the image comprises a first portion to be displayed at a first resolution and a second portion

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**mobile with respect to the first portion**, to be displayed at a second resolution".

Examiner disagrees with applicant this point of view because (1) Jouppi teaches that "a first portion of an image is displayed on a display at a first scale. At least one second portion of the image is displayed on the display... The at least one second side portion is displayed at a second scale higher than the first scale" (see column 1, lines 46-52), (2) Jouppi teaches the video images captured from cameras are not only a stand still video image, they could be motion video image or mobile (e.g., conferee leaving the meeting by walking in telepresence captured by camera (see column 5, lines 28-42) and (3) the higher resolution image and lower resolution image mention above can be displayed as a single image (see column 7, lines 7-60 and column 8, lines 21-30). Thus, it is clear that Jouppi teaches the second portion of the image mobile with respect to the first portion of the image.

On page 3, first paragraph, applicant also argues that "this required significant hardware and software mathematical development to produce this capability".

However, the hardware and software mathematical development are not recited in all dependent claims 1, 8 and 11. The significant hardware and software mathematical development are recited in dependent claims 10 and 12 and are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

On page 3, second paragraph, applicant argues that "the image transformer in Kreitman is used once prior to the display of the image to account for any misalignment in the set-up of the projectors" while "applicant's image transformer is used to make

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sure, as the second portion of the image moves with respect to the first portion of the image, that the second portion of the image is properly aligned with respect to the first portion of the image so that the second portion is displaying an enhanced resolution image of the first portion that corresponds to the location of the second portion".

However, these limitations are not recited in the claims. The claims (e.g., claim1) simply require "an image transformer generating an input to the second video source such that the second video source displays the second portion aligned with the first portion displayed by the first video source". The claim does not require "the second portion of the image moving with respect to the first portion" in the claimed limitation "image transformer" nor require "enhance resolution" as applicant's argument.

On page 4, lines 8-17, applicant argues that the use of homogeneous transforms in Kreitman is different than the use of homogeneous transforms in applicant's invention as recited in claim 7. However, the use of homogeneous transforms in Kreitman is different from the use of homogeneous transforms in applicant's invention, but the claim so broad that it reads on homogeneous transforms of Kreitman. Claim 7 simply requires "the image transformer comprises a homogeneous transform". Nowhere in the claim 7 recites "tiny shifts", "rotation through small angles" as applicant arguments.

As to claim 11, applicant presents the same argument as presented in claim 1 and 7. Thus, the argument presented by applicant to claim 11 is discussed with respect to claims 1 and 7 above.

As to claims 2-3, applicant argues that applicant argues that applicant's specification discloses a movable mirror, a controllable optical transmitter, or a micro-electromechanical device as examples of an image steerer. However, these devices are not recited in claims 2-3.

As to claim 6, applicant argues that applicant argues that none of the references teaches the first portion comprises the entire image and wherein the second portion is a subset of the entire image. Examiner disagrees with applicant this point of view since this limitation is taught by Jouppi. For example, the entire image could be a conference room including conferees and a conferee is a subset the entire image of the conference room.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



### **Inquiries**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

**Any response to this action should be mailed to:**


Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

  
C. Nguyen  
December 4, 2003

  
CHANH NGUYEN  
PRIMARY EXAMINER